Prof. Chase then made a short communication, placing data on the blackboard, to support a further enlargement of the range of applications of his photodynamic theory to natural phenomena;—and the meeting was adjourned.

Stated Meeting, November 18, 1881.

Present, 11 members.

President, Mr. FRALEY, in the Chair.

Mr. Sharpless accepted membership by letter, dated West Chester, October 29, 1881.

The Cincinnati Observatory acknowledged receipt of Proceedings No. 108.

The Chapultepec Observatory of Mexico requesting exchanges, was placed on the list of correspondents to receive the Proceedings regularly.

Donations for the Library were received from the Royal Society of Tasmania; the Geological Survey of India; Imperial Academy at St. Petersburg; German Geological Society and Society of Physics, Berlin; Natural Science Union, Bremen; Neues Lausitzisches Magazin, Görlitz; Royal Saxon Society, Fürstliche Jablonowskischen Gesellschaft, and Zoologischer Anzeiger, Leipsig; Royal Grand Ducal Institute, Luxembourg; Society of Physics, Geneva; Vaudoise Society, Lausanne; Swiss Society; Anthropological Society, Zoological Society, and Revue Politique, Paris; Revista Euskara, Pamplona; Nature, London; Royal Irish Academy, Dublin; Essex Institute, Salem; Boston Natural History Society; Museum of Comparative Zoology, Cambridge; Mr. Aug. R. Grote, Buffalo; Pharmaceutical Association, Historical Society, Franklin Institute, and the Editor of the American News, Philadelphia; Department of the Interior, and W. J. Hoffman, M. D., Washington; Astronomical Observatory of Chapultepec; Geographical and Statistical Society; Editors of

the Revista Mensual Climatologica, and the Revista Cientifica Mexicana, and the Ministerio de Fomento, Mexico.

An obituary notice of the late Wm. E. DuBois, was, by appointment, read by Mr. Robert Patterson.*

Dr. Brinton explained to the Society the substance of his paper on the Gods in the Kiché Myth, the Popol Vuh.

Mr. Lesley read Dr. Newberry's paper on the Origin of the Lake Basins, and then remarked on the relation of Dr. Newberry's claims to Prof. Spencer's discoveries and views.†

Mr. Lesley gave a short sketch of the history and progress of the excavations at Assos during the last few months, under the auspices of the Boston Archæological Society, as he obtained it in conversations with Prof. W. R. Ware of Columbia College.

The minutes of the last meeting of the Board of Officers and members in Council were read, and the consideration of the resolution therein was postponed for the next meeting.

Certain valuable manuscripts were ordered, on motion of Dr. Brinton, to be placed by the Library Committee in the custody of the Fidelity for safe keeping.

Pending nomination No. 935, and new nominations Nos. 946 to 950 were read, and the meeting was adjourned.

Photodynamic Notes, IV. By Pliny Earle Chase, LL.D.

(*Read before the American Philosophical Society, November 4, 1881.*)

91. *Photodynamic Determination of Sun's Mass and Distance.*

In Notes 5 and 23, I estimated Sun's mass both from projectile and from simple oscillatory considerations. In the former note I deduced the distance from an assumed solar density, instead of taking the ratio of variability $d^3 \propto mt^2$. My conviction of the importance of Fourier's theorem has been strengthened by further study, and I accordingly give, in the present note, the coördinate photodynamic elements which may be simply deduced from it.

If we regard the luminiferous æther as a nebulous elastic atmosphere, and the solar system as a partially condensed nebula, the nebula is not homogeneous. It contains, in addition to various subordinate and com-

* This paper will be printed in Vol. xx, No, 111.

† Dr. Newberry's paper will be printed in Vol. xx, No. 111.